

Title (en)

PARTICLE TRACKING ANALYSIS METHOD USING SCATTERED LIGHT (PTA) AND DEVICE FOR DETECTING AND IDENTIFYING PARTICLES OF A NANOMETRIC ORDER OF MAGNITUDE IN LIQUIDS OF ALL TYPES

Title (de)

VERFAHREN DER PARTIKEL TRACKING ANALYSE MIT HILFE VON STREULICHT (PTA) UND EINE VORRICHTUNG ZUR ERFASSUNG UND CHARAKTERISIERUNG VON PARTIKELN IN FLÜSSIGKEITEN ALLER ART IN DER GRÖßENORDNUNG VON NANOMETERN

Title (fr)

PROCÉDÉ D'ANALYSE DE SUIVI DE PARTICULES (PTA) À L'AIDE DE LUMIÈRE DISPERSE ET DISPOSITIF POUR DÉTECTER ET CARACTÉRISER DES PARTICULES DE L'ORDRE DE GRANDEUR DES NANOMÈTRES DANS DES LIQUIDES DE TOUS TYPES

Publication

EP 3146308 A1 20170329 (DE)

Application

EP 15749713 A 20150512

Priority

- DE 102014007355 A 20140519
- DE 2015000241 W 20150512

Abstract (en)

[origin: WO2015176698A1] A method and device for optically detecting particles (23) have the following features: (a) a cell wall (9) of rectangular cross-section, made of black glass, is fitted on a longitudinal surface and adjoining transverse surface with an L-shaped heating and cooling element (1); (b) the centre of the transverse surface of the cell wall (9) opposite the transverse surface which forms the support of the cell wall (9) is irradiated by an irradiation device and is observed at right angles to the optical axis of the irradiation device by means of an observation device; (c) the focus of the irradiation device and the focus of the observation device can be moved by a motor to any point in the three-dimensional inner region defined by the cell wall (9) by means of a control device; (d) the surface of the cell wall (9) opposite the optical glass window (11) through which the radiation from the irradiation device enters comprises another optical glass window (11) in the centre thereof; (e) the temperature of the surface of the cell wall (9) is monitored by means of two thermistors (8).

IPC 8 full level

G01N 15/02 (2006.01); **G01N 15/00** (2006.01); **G01N 15/10** (2006.01); **G01N 21/03** (2006.01); **G01N 21/47** (2006.01); **G01N 27/447** (2006.01)

CPC (source: CN EP KR US)

G01N 15/0211 (2013.01 - CN EP KR US); **G01N 15/0227** (2013.01 - CN KR US); **G01N 15/1433** (2024.01 - US); **G01N 15/1436** (2013.01 - US); **G01N 21/0332** (2013.01 - EP KR US); **G01N 21/51** (2013.01 - US); **G01N 27/44752** (2013.01 - EP KR US); **G02B 21/06** (2013.01 - US); **G02B 21/365** (2013.01 - US); **G06T 7/70** (2017.01 - EP US); **H04N 5/772** (2013.01 - US); **G01N 21/0332** (2013.01 - CN); **G01N 27/44752** (2013.01 - CN); **G01N 2015/0038** (2013.01 - CN EP KR US); **G01N 2015/0053** (2013.01 - CN EP KR US); **G01N 2015/0222** (2013.01 - CN EP KR US); **G01N 2015/0238** (2013.01 - CN EP KR US); **G01N 2015/1027** (2024.01 - CN EP KR US); **G01N 2021/4726** (2013.01 - CN EP KR US); **G01N 2201/06113** (2013.01 - US); **G06T 2207/10056** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102014007355 B3 20150820; CN 106233120 A 20161214; CN 106233120 B 20190419; DK 3146308 T3 20211206;
EP 3146308 A1 20170329; EP 3146308 B1 20211006; JP 2017524123 A 20170824; JP 6348187 B2 20180627; KR 101884108 B1 20180731;
KR 20160138143 A 20161202; US 2017059471 A1 20170302; US 9939363 B2 20180410; WO 2015176698 A1 20151126

DOCDB simple family (application)

DE 102014007355 A 20140519; CN 201580020968 A 20150512; DE 2015000241 W 20150512; DK 15749713 T 20150512;
EP 15749713 A 20150512; JP 2016564082 A 20150512; KR 20167029011 A 20150512; US 201515305401 A 20150512